

ABSTRACT OF THE DISCLOSURE

The present invention relates to a gene examining apparatus utilizing a computer, the apparatus comprising (1) DNA microarrays in each of which a large number of fine liquid accommodating sections are two-dimensionally arranged so that openings of the fine liquid accommodating sections are located on the same plane, in which each of the liquid accommodating sections can three-dimensionally accommodate a liquid, and in which hybridization reaction occurs in the liquid accommodating section between a target nucleic acid already labeled with an optical marker substance and the nucleic acid probe, and (2) a microscope comprising a stage supporting the DNA microarrays set forth in (1), a temperature regulating section that regulates the temperature of each DNA microarray, and imaging means for picking up an image of an optical signal from the DNA microarray.